

**REMARKS**

**I. Formalities**

Applicant notes that the Examiner still has not indicated consideration of the references listed on the PTO/SB/08 Form submitted with the Information Disclosure Statement of February 9, 2004. Applicant again respectfully requests that the Examiner sign the PTO/SB/08 Form, initial the references cited therein, and return it along with the next Office Action.

**II. Status of the Application**

By the present Amendment, Applicant is amending claims 2-5, 9, 11, 12, and 15. In addition, Applicant is adding new claim 36 in order to more fully to cover various aspects of the invention as disclosed in the specification. No new matter is added. Further, Applicant is canceling claim 21 without prejudice or disclaimer.

Claims 2-13, 15, 16, 25-31, and 36 are all the claims pending in the application. Claims 2-6, 9, 10, and 21 have been rejected. Claims 25-31 have been allowed. Claims 7, 8, and 11-16 would be allowable if rewritten in independent form. The present Amendment addresses each point of rejection raised by the Examiner. Favorable reconsideration is respectfully requested.

**III. Claim Rejections Under 35 U.S.C. § 102(e)**

Claim 21 stands rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,963,436 to Watanabe et al. (hereinafter “Watanabe”). Applicant is canceling claim 21 without prejudice or disclaimer, rendering moot the rejection of this claim.

**IV. Claim Rejections Under 35 U.S.C. § 103(a)**

Claims 2-6, 9, and 10 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Watanabe in view of U.S. Patent No. 6,064,513 to Wada et al. (hereinafter “Wada”). Applicants respectfully traverse this ground of rejection.

Watanabe is directed to an optical 3R repeater (col. 3, lines 3-5). As the Examiner concedes, Watanabe does not teach or suggest a second optical 3R repeater that receives a first regenerated signal pulse output by a first optical 3R repeater as an intermediate signal light, and regenerates an optical communication signal pulse based on the intermediate signal light, as recited in independent claim 4. However, the Examiner maintains that Wada discloses a series of regenerative repeater devices that are connected together, and that it would have been obvious to a person of ordinary skill in the art to connect two optical 3R repeaters in order to maintain signal quality over long transmission distances.

In order to further clarity the claimed invention, Applicant is amending independent claim 4 to recite that “a pulse time width of said intermediate signal light is smaller than a pulse time width of said optical communication signal pulse.” Applicant submits that neither Watanabe nor Wada discloses this feature. As discussed above, Watanabe is directed to a single optical 3R repeater, and does not generate an intermediate signal that is received by a second optical 3R repeater. Further, although Wada discloses a transmission system with a plurality of optical 3R repeaters, Wada does not teach or suggest that the pulse time width of the intermediate signal light generated by the first optical 3R repeater is smaller than the pulse time width of the optical communication signal pulse that is incident on the first optical 3R repeater, as recited in amended claim 4. Instead, each optical 3R repeater in Wada performs the standard reshaping, retiming, and regenerating functions (col. 1, lines 48-49). Therefore, the pulse time width of the intermediate signal light generated by a first optical 3R receiver in Wada should be the same as the pulse time width of the incident optical signal.

Accordingly, Applicant submits that claim 4 is patentable over Watanabe and Wada at least by virtue of the aforementioned differences, as well as its additionally recited features.

Further, claims 2, 3, 5, 6, 9, and 10 are patentable over Watanabe and Wada at least by virtue of their respective dependencies on claim 4, as well as their additionally recited features.

**V. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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